

III. CLAIM AMENDMENTS

1. (Currently Amended) A digital camera system comprising:

a lens assembly mounted for receiving an image and projecting said image on an image plane;

a micro-electromechanical (MEMS) system support mechanism for providing at least two positions of movement to a supported element, said MEMS support mechanism being fabricated integrally with said supported element; and

a semi-conductor image sensor mounted at said image plane for movement on said MEMS system support mechanism and being operatively associated with said lens assembly to generate a digital image.

2. (Currently Amended) A digital camera system, according to claim 1, wherein said MEMS system support mechanism is an electrostatic resonator.

3. (Currently Amended) A digital camera system, according to claim 1, wherein the image sensor is fabricated on a silicon chip in which is imbedded control circuitry and said MEMS system support mechanism is integrally fabricated therewith.

4. (Original) A digital camera system, according to claim 1, wherein said movement of said image sensor provides an auto focus function.

5. (Currently Amended) A digital camera system, according to claim 1, wherein said lens assembly is mounted for movement on said MEMS system support mechanism for movement relative to said image sensor and said image sensor is fixed, said movement adapted to provide a zoom function.

6. (Currently Amended) A digital camera system, according to claim 1, further comprising:

a substrate for supporting said digital camera system;

a first MEMS fabricated on said substrate and connected to said lens system assembly for providing movement of said lens system assembly between at least two positions;

a second MEMS fabricated on said substrate and connected to said image sensor for providing movement of said image sensor between at least two positions; and

wherein said movement of said lens system and said image sensor is relative to each other to provide both an autofocus and zoom function.

7. (Currently Amended) A mobile communication device including a system to transmit data over a communication network comprising:

a housing containing said communication system to transmit data;

a lens assembly mounted within said housing for receiving an image and projecting said image on an image plane;

a micro-electromechanical (MEMS) system support mechanism for providing at least two positions of movement to a supported element, said MEMS system support mechanism being fabricated integrally with said supported element; said MEMS system support mechanism mounted within said housing; and

a semi-conductor image sensor mounted at said image plane for movement on said MEMS system support mechanism and being operatively associated with said lens assembly to generate a digital image.

8. (Currently Amended) A mobile communication device including a system to transmit data over a communication network, according to claim 7, wherein said MEMS system support mechanism is an electrostatic resonator.

9. (Currently Amended) A mobile communication device including a system to transmit data over a communication network, according to claim 7, wherein the image sensor is fabricated on a silicon chip in which is imbedded control circuitry and said MEMS system support mechanism is integrally fabricated therewith.

10. (Original) A mobile communication device including a system to transmit data over a communication network, according to claim 7, wherein said movement of said image sensor provides an auto focus function.

11. (Currently Amended) A mobile communication device including a system to transmit data over a communication network, according to claim 7, wherein said lens assembly is mounted for movement on

said MEMS system support mechanism for movement relative to said image sensor and said image sensor is fixed, said movement adapted to provide a zoom function.

12. (Currently Amended) A mobile communication device including a system to transmit data over a communication network, according to claim 7, further comprising:

a substrate for supporting said digital camera system;

a first MEMS fabricated on said substrate and connected to said lens system for providing movement of said lens system between at least two positions;

a second MEMS fabricated on said substrate and connected to said image sensor for providing movement of said image sensor between at least two positions; and

wherein said movement of said lens system assembly and said image sensor is relative to each other to provide both an autofocus and zoom function.